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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/507,478	02/17/2000	Henrique Malvar	MS1-338US	7435

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LEE & HAYES PLLC  
421 W RIVERSIDE AVENUE SUITE 500  
SPOKANE, WA 99201

EXAMINER

CALLAHAN, PAUL E

ART UNIT PAPER NUMBER

2137

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/507,478	<b>Applicant(s)</b> MALVAR ET AL	
	<b>Examiner</b> Paul Callahan	<b>Art Unit</b> 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2004.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION**

***Response to Amendment***

1. Claims 1-57 are pending in this application and have been examined.

***Response to Arguments***

2. Applicant's arguments filed have been fully considered but they are not persuasive.

The applicant argues the amended claim 25 may be distinguished from Nicolai reference on the basis of an added limitation of a key being sent on a separate channel. Yet such is taught by the Hogan reference in col. 5 lines 32-34 in the rejection of the claims.

The applicant argues that amended claim 52 may be distinguished from the prior art since Shepard fails to teach "processing the scrambled content to modify the scrambled content". Yet such was taught by Hogan in the abstract, fig. 7, and col. 5 lines 7-30.

The applicant argues that error correction coding as taught by Hogan does not read on the claim language of "processing data". Yet the term "processing data" as used by one of ordinary skill in the art does include error correction coding as a form of data processing.

***Claim Rejections - 35 USC § 102 - 35 USC § 103***

3. Claims 1, 2, 15, 19-21, 25, 36, 39, 48-49, 52, 55, and 55 have been amended by the latest amendment. The rejection of those claims is found infra. The remaining claims have not been changed and therefore the statement of the rejections has not changed either. The statements or the rejections of the non-amended claims will not be repeated herein but instead are hereby incorporated in their entirety by reference to the previous Office Action in the case.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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5. Claim 52 is rejected under 35 U.S.C. 102(e) as being anticipated by Shepard 5,598,164.

In the second box down on the right of figure 4, a provider (which reads on applicant's server) scrambles and then compresses a selection, which is content. This anticipates the first two clauses of claim 52. In the box below, the encrypted, compressed data is sent to a customer, who reads on applicant's client. Thus is the third clause anticipated. In lines 18-41 of column 2, Shepard describes decompressing data and returning the decompressed data to a storage device. The decompression clearly reads on applicant's fourth clause. Data transfer is a type of processing and thus reads on the fifth clause. The content is then descrambled and output, thereby anticipating the last three clauses of claim 52.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over unpatentable over applicant's admitted prior art in view of Hogan (6047069).

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As for claim 1, Figure 2 of applicant's disclosure, which is labeled as prior art, presents one of more output devices (element 44), a content player (element 52), and a processor (element 64). The operation of these elements requires a processor, a memory, and an operating system. As such, the limitations of the first five clauses of claim one are met. This prior art diagram does not say that data is scrambled before being processed, or that it is decrypted after the processing. In his abstract, figure 7, and lines 7-30 of column 5, Hogan teaches processing data while it is encrypted, thereby preventing access to confidential data. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to keep data encrypted during its processing, as taught by Hogan, to protect data from illicit viewing. Hogan teaches the processing tools modifying the scrambled content in the abstract, fig. 7, and col. 5 lines 7-30.

Claim 2 is obvious because applicant's background section teaches filter graphs as being used in processing.

8. Claims 15, 19, 20, 21, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nicolai et al. (4188580) in view of the Hogan US 6,047,069 and Microsoft Press Computer Dictionary 3rd ed.

As per claims 15, 19, 20, and 21, Figure 98 and elements 11 and 13 of figure 1 anticipate a tone generator and modulator that creates a periodic set of tone patterns.

As described in lines 22-30 of column 4, the tones, described by Nicolai et al. as a tracking or masking signal, provide a masking function and thus anticipate a first key.

As shown in figure 1, the outputs of elements 11 and 13 find their way to the pseudo-random number generator (element 10). The pseudo-random number generator anticipates applicant's random number generator. (Applicant uses the phrase "random number generator", which encompasses both pseudo-random number generators and truly random RNGs: the examiner believes the latter would be unworkable in applicant's invention.) The second key is sent by the code select (element 76).

As described in the abstract, the first key (as the tracking signal) and the pseudo-random generator output are added to the signal, thereby anticipating the third clause of claim 15. See also elements 33 and 36 in figure 1. Nicolai et al. do not say that the first key is embodied in the tracking signal as amplitude modulations. The definition of amplitude modulation in the computer dictionary defines it as encoding data in a constant frequency transmission by varying amplitude. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the first key of Nicolai et al. in the tracking signal by modulating the amplitude of the tracking signal, as is well known in the art of computer communications.

Nicolai does not explicitly teach sending a second key on a separate channel. Hogan does teach this feature in the abstract, fig. 7, and col. 5 lines 7-30. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated this feature into the system of Nicolai. It would have been desirable to do so as this would significantly increase the security of key transmission.

As per claim 25, the claim was rejected under 35 USC 102(b) as clearly anticipated by Nicolai in the previous Office Action. The amended claim adds the additional limitation not explicitly taught by Nicolai of a second key being sent via a separate channel. Hogan does teach this feature in the abstract, fig. 7, and col. 5 lines 7-30. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Nicolai. It would have been desirable to do so as this would significantly increase the security of key transmission.

9. Claims 36, 39, 48, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nicolai et al. and Hogan as applied to claim 28 above, and further in view of Schneier. Nicolai et al. and Hogan teach encrypting data at a client, processing the encrypted data, and then decrypting and playing the data. They do not say that the data is encrypted and compressed for transmission from the server to the client. On page 226, Schneier gives reasons to both encrypt and compress data: the amount of data is reduced, security is increased, etc. The section also implicitly teaches transmission. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to receive encrypted, compressed data from an outside source, as taught by Schneier, and to decrypt and decompress that data at the media player in Nicolai et al. and Hogan. Hogan teaches the processing tools modifying the scrambled content in the abstract, fig. 7, and col. 5 lines 7-30.



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10. Claims 55 and 57 are the program product embodied in a memory medium causing the apparatus of claims 15 and 21 to carry out the method of the invention and are therefore rejected on the same basis as are those claims.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following US Patent document teaches features pertinent to the applicant's invention:

Miller            3,723,878

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul E. Callahan whose telephone number is (571) 272-3869. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Caldwell, can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is: (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

4-15-05

*Paul Callahan*

*Andrew Caldwell*

ANDREW CALDWELL  
SUPERVISORY PATENT EXAMINER